IN THE SPECIFICATION

Please amend the paragraph at page 1, lines 13-19, as follows:

Products called as digital information consumer electronics have increased. It is predicted that these products will be widespread according to the beginning of contents distribution on the Internet. In a category of the digital information consumer electronics, there are included various kinds of products which deal with digital data and digital contents such as a mobile audio player, a digital broadcasting TV, a set top box and a hard disk recorder.

Please amend the paragraph at page 1, lines 29-36, as follows:

Here, it is assumed to transmit AV data that copyright protection is necessary from a certain transmitter to a receiver. In this case, we have to pay attention that copyright protection ~~intends~~ relates to transmission of AV data only in a range that each individual person (or in a case of extended interpretation, each family member) enjoys. Transmission and reception of AV data between different persons should not be permitted, as long as permission of a contents provider is not obtained.

Please amend the paragraph at page 2, lines 28-32, as follows:

However, progress of recent Internet technology causes new problems. In the Internet, it is possible to transmit and receive arbitrary data between users away an arbitrary distance. Therefore, it is possible to easily transmit data between Japan and the United [[State]] States at low cost.

Please amend the paragraph at page 2, line 33 to page 3, line 8, as follows:

It is possible to encrypt AV data that copyright protection is necessary for each packet. Also it is technically possible to transmit the encrypted packet in a capsulated state on Internet. Accordingly, there is a likelihood that a packet of AV data transmitted by the Bluetooth device which can communicate at only a close range may be converted into [[a]] an internet capsule to transmit it to a distant location. In this case, if both of the receiver for receiving the internet packet and the Bluetooth device at sending side support the DTCP function, the authentication & key exchange processing is established between both of the receiver and the Bluetooth device, and it is possible to record and reproduce the AV data.

Please amend the paragraph at page 3, lines 9-28, as follows:

The "DTCP over IP" which prescribes procedure of copyright protection using the internet protocol (IP) adopts an RTT (Round Trip Time) as a technique for performing inside-home communication. More specifically, before or after the authentication & key exchange processing for copyright protection, or along the way of the authentication & key exchange process, the RTT is measured. The RTT is a time period from a time when a specific packet is sent from the transmitter to the receiver, until a time when the specific packet is sent back from the receiver to the transmitter. At this time, the receiver which receives the specific packet may transmit the specific packet as it is, or may include new data in the received specific packet. In this way, if the transmitter can correctly acknowledge a relationship between the transmitted original packet and the received packet, there is no particular limitation to a format of the packet sent back by the receiver. The transmitter measures the RTT, and if the measured value is equal to or less than a constant value, the transmitter can determine that the receiver ~~locates~~ is located in [[a]] close range, i.e. the receiver ~~locates~~ is

located inside the home. Therefore, it is possible to prevent transmission of AV data at a long distance.

Please amend the paragraph at page 6, lines 15-21, as follows:

Each of the transmitter 1 and the receiver 2 implements a Bluetooth AV profile and "DTCP over Bluetooth" which prescribes procedure of copyright protection for Bluetooth. Here, the Bluetooth AV profile is a stipulation for transmitting audio and video on Bluetooth and for performing command control. The "DTCP over Bluetooth" implements [[a]] an RTT measurement scheme for performing inside-home communication.

Please amend the paragraph at page 6, lines 22-34, as follows:

FIG. 2 is a block diagram showing one example of internal configuration of the transmitter 1 in FIG. 1. FIG. 3 is a block diagram showing one example of internal configuration of the receiver in FIG. 1. The transmitter 1 of FIG. 2 has a DTCP device ID ~~register~~ recording unit 10, a DTCP authentication & key exchange processing unit 11, a contents providing unit 12, an encryption processing unit 13, a packet processing unit 14, a communication processing unit 15 and a Bluetooth interface unit 16. The receiver 2 of FIG. 3 has a DTCP device ~~register~~ recording unit 20, a DTCP authentication & key exchange processing unit 21, a contents processing unit 22, an encryption processing unit 23, a packet processing unit 24, a communication processing unit 25, and a Bluetooth interface unit 26.

Please amend the paragraph at page 7, lines 32 to page 8, line 6, as follows:

First of all, the transmitter 1 transmits and receives the command for the authentication & key exchange processing with the receiver 2 (step S1). Subsequently, a preliminary preparation for the authentication & key exchange processing is performed (step

S2). Here, certificates and random numbers are transmitted and received [[to]] to/from each other to verify the respective certificates. The certificates include descriptions as to whether the transmitter 1 and the receiver 2 have the RTT measurement function. Accordingly, by referring to the certificate transmitted from the receiver 2, it is possible to detect whether or not the receiver 2 has the RTT measurement function.

Please amend the paragraph at page 8, lines 12-19, as follows:

When the processing of step S2 is completed, parameters used for generating the key in the authentication & key exchange processing are exchanged (step S3). The parameters are values of first phase of Diffie-Hellman using an elliptic curve. Subsequently, a preliminary preparation processing for the RTT measurement is performed (step S4). Here, RTT_Ready commands indicating that preparation for the RTT measurement is ready are exchanged to each other.

Please amend the paragraph at page 8, line 36 to page 9, line 11, as follows:

As a result of performing the RTT measurement in step S6, if the RTT is equal to or less than a predetermined value, it is determined that the receiver 2 ~~locates~~ is located inside the home, i.e. near the transmitter 1, and the transmitter 1 registers a device ID of the receiver 2 to the DTCP device ID ~~register~~ recording unit 20. The registered device ID may be invalidated after M hours have been passed. Therefore, there is no likelihood that the registered device ID is illegally acquired by some means to make [[wrong]] inappropriate use. Furthermore, due to radio wave status, trouble of the receiver 2 and so on, there is a possibility that the RTT measurement is not temporarily performed correctly. Therefore, the RTT measurement may be repeatedly performed multiple numbers of times.

Please amend the paragraph at page 9, line 35 to page 10, line 5, as follows:

If it is determined that the RTT is equal to or less than the predetermined value in step S15, the device ID of the receiver 2 is registered to the DTCP device ID ~~register~~ recording unit 10. A timer measurement is begun (step S18). When a measuring time by the timer measurement reaches a predetermined time M, the registered device ID is automatically deleted from the DTCP device ID ~~register~~ recording unit 20.

Please amend the paragraph at page 10, lines 19-26, as follows:

Bluetooth is often implemented to ~~equipments~~ equipment which ~~require~~ requires low power consumption such as a cellular phone and the other mobile devices. Therefore, Bluetooth standardizes various schemes for realizing low power consumption. One of the schemes is the sniff mode. Bluetooth is a network technique for performing one-to-many communication. A source node in that network is called as a master, and the other branch nodes are called as slaves.

Please amend the paragraph at page 10, line 35 to page 11, line 6, as follows:

Each interval of scales in FIG. 7 expresses a transmission cycle of the packet by the master 30 or the slaves 31. "M" expresses the transmission cycle allocated to the master 30, and "S" expresses the transmission cycle allocated to the slaves. The master 30 and the slaves 31 [[is]] are permitted ~~transmission of~~ to transmit the packets only within the sniff cycle T1 determined in advance. FIG. 7 shows the sniff cycle T1 of a certain slave 1. Arrows of FIG. 7 become a transmission timing of the slave 31.

Please amend the paragraph at page 12, lines 16-24, as follows:

FIG. 8 is a diagram explaining a polling interval. As shown in FIG. 8, time slots are allocated for the respective master 30 and slaves 31. Each slave 31 performs wireless communication with the master 30 only within the polling cycle. If the polling interval T2 is long, when a certain slave 31 receives the packet for the RTT measurement, the response for the received packet has to ~~be waited~~ wait until the subsequent polling. Therefore, the waiting time becomes long, and as a result, the RTT measurement value becomes large.

Please amend the paragraph at page 12, line 35 to page 13, line 9, as follows:

According to the standard of Bluetooth, there are some modes relating to wireless transmission power intensity. That is, there are some modes called as classes. Class 1 expresses that wireless radio field intensity is strong (even in a distance of 100m, it is possible to communicate between the transmitter 1 and the receiver 2), and class 2 expresses that wireless radio field intensity is weak (only within a distance of 5-10 m, it is possible to communicate between the transmitter 1 and the receiver 2). As a scheme of ensuring that the transmitter 1 and the receiver 2 ~~locate adjacently~~ are located adjacent to each other, it is more desirable to use the radio field intensity of class 2 than that of class 1.

Please amend the paragraph at page 14, lines 21-33, as follows:

In FIG. 9, after the authentication & key exchange processing is begun (step S21), the Bluetooth parameters for the RTT measurement are changed (step S22). Here, the Bluetooth parameters ~~includes~~ include at least one of the above (1) to (4). More specifically, when the sniff cycle T1 is changed, the sniff cycle T1 is changed to be small so as to be able to quickly send back the response to the transmitter 1. When the polling interval T2 is changed, the polling interval T2 is changed to be small in the same way. When the wireless transmission

power is changed, the radio field intensity is weakened so as to be able to transmit the packets only within a close range. When performing the master slave exchange, the receiver 2 for receiving the RTT packet is set to the master 30, and control authority of the timing slots is given to the receiver 2.